



End Users Focus-Group Workshop

ANS Annual Meeting 2007
Friday, June 29, 2007

8:00 Welcome and Introductions

The Nuclear Criticality Safety Program (NCSP) Manager, Jerry McKamy opened the meeting by welcoming everyone and thanking them for their support and attendance. He then showed the Agenda for the day and explained the purpose of the Workshop was to foster communications between the NCSP and the DOE community. (Agenda available – “Agenda End Users Meeting ANS Boston 2007”)

8:10 Communicating with the NCSP Website

Jerry McKamy discussed the NNSA NCSP’s goal to strive “to remain aware of the technical infrastructure needs of the DOE criticality safety community through various means of communication and feedback while maintaining programmatic transparency to facilitate interaction and enhance trust in the NCSP among all stakeholders.” He explained the data available on the NCSP Website (<http://ncsp.llnl.gov>), including all of the recent additions to the website based on feedback from the EndUsers community. (Slides available – “Final Boston 2007 NCSP Mtg”)

8:20 Report on the First C_edT Meeting

Jerry McKamy discussed the first meeting of the Critical-subcritical Experiments Design Team (C_edT) held in Las Vegas, NV in March of this year with the purpose of 1) identifying the first critical experiment benchmark campaign important to National Nuclear Safety Administration (NNSA) to perform after the Critical Experiment Facility (CEF) startup and, 2) laying out the plan for designing and approving the experiment(s) using all the capabilities available to the NCSP to develop an experiment proposal/design/planning/approval/analysis process. The first experiment benchmarks identified were:

- 1a. Lucite Reflected Subcrits in 2008
- 1a. Nickel or Tungsten Reflected Subcrits to follow
- 1b. HEU Moderated Spherical Lattice Using Rocky Flats Shells (CEF Startup – 2010 tentatively)
- 1c. Vanadium Foils and Plates (CEF Startup)



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- 1d. Borabond Criticals Supporting Y-12 UPF and ES3100 Shipping Container (CEF Startup)
2. Flat Top Gap Experiments
3. Bare Ball HEU (supporting Np reference exp.)

(Slides available – “Final Boston 2007 NCSP Mtg”)

8:40 Process for Requesting New Critical-Subcritical Integral Experiments

Jerry McKamy continued the previous discussion by explaining in detail the process for submitting requests to the NCSP website <http://ncsp.llnl.gov> for requesting new critical or subcritical integral experiments, how approvals are obtained, and the role the requestor is expected to play in the request process. He also explained that Hazel Slemmons is in the process of writing a Primer for the integral experiments form (this form is referred to as CED-0). (Slides available – “Final Boston 2007 NCSP Mtg”)

9:10 BREAK

9:20 NCSP Demonstration of the CED-0 Request Form

The NCSP Webmaster, Chuck Lee provided an on-line demonstration of the CED-0 and walked through the entire process of how each field should be filled out, how the approvals route through the system, and the notifications that are sent throughout the process to keep the requestor informed of all progress. Additionally, Chuck provided the 2007 statistics to date on website activity for each of the various sections of the site. (Slides available – “ANS Boston 2007 website”)

9:50 Final Questions and Dialog

This was an interactive discussion between Jerry McKamy, Chuck Lee, the NCSP Management staff present and the EndUsers, as well as other attendees, in regards to the website and the request of integral experiments.

10:00 Approach for documenting sprinkler data/impacts

Barbara Krogfuss from Y-12 provided an overview of the Y-12 Sprinkler Evaluation Tool (SET). She explained that the facility had a lack of consistent guidance on which sprinkler density range should be used in NCS analyses and that it was too costly to review every sprinkler system and sprinkler head in every nuclear facility for sprinkler densities from 0 g/cc to 1.0 g/cc water. Therefore, she demonstrates the technique used by the facility and how it bounds the majority of facilities of concern at Y-12. Although the results from the Y-12 evaluation cannot be used at other sites due to Y-12 specific values, the methodology developed for this problem can be applicable to other sites. (Slides available – “Y-12 Sprinkler Evaluation Tool”)

10:30 BREAK

10:40 Overview of the Y-12 visit to AWE Aldermaston

Cris Worley of Y-12 recently visited Aldermaston and discussed several items that were observed and/or discussed during his visit. These items included: the Fissile Material Control System Design, the EU Periodic Review of Safety Methodology, Aldermaston new construction activities, their Facility Criticality Representative Program, and how they handle NDA and Fissile Material Holdup Activities. Additionally, Cris detailed his tours of the PU Facility and Fissile Material Control System and the EU Facility and Fissile Material Control System. (Slides available – “awe ans y12-template”)

11:10 Fire-fighting/first responder criticality safety training

Valerie Putman of Idaho National Laboratory (INL) gave a presentation detailing the recently developed “Criticality Safety Training for INL Firefighters”. This presentation included the components of their required training, what NCS basics were covered (with a tailored emphasis), and the unique details of this training that made it memorable and interesting to the trainee (based on survey results of participants in the training). (Slides available – “20070629firefighterNCS”)

11:40 Endusers business and update

The EndUser Chair, Todd Taylor of INL, kicked off his discussion by providing an overview of how he saw the EndUsers Group, which “provides a forum to promote recognition of the Enduser’s needs, information exchange, and lessons learned in criticality safety operations support. An Enduser is loosely defined as a criticality safety professional that is tasked with day-to-day criticality safety support to a nuclear facility. The Enduser Group is made up from managers and/or technical points of contact from each DOE site or operation.” Todd explained that he has updated the EndUsers Charter

to reflect this vision. Todd further explained that he would like, with the help of the NCSP, to hold a stand-alone (site locale to be determined) EndUsers meeting to:

- Provide a focused forum to identify and discuss issues
- Exchange technical and programmatic information
- Tour site facilities
- Allow engineers and Facility Operations to meet Endusers

(Slides available – “enduser.boston.2007”)

The NCSP EndUsers Liaison, Nichole Ellis then provided a brief update of the action items that were the result of the 2006 ANS Winter Meeting EndUsers Forum. These action items and current status are available in “EndUsers Action Items – ANS Boston 2007.”

12:00 Adjourn

If there are any questions in regards to the contents of the Endusers Discussion, please feel free to contact the Endusers Chairman, Todd Taylor at j.taylor@inl.gov or the NCSP Endusers Liaison, Nichole Ellis at ellis_9899@msn.com. If there are any questions for any of the other speakers, please direct them to Nichole Ellis and she will send them to the appropriate personnel. For everyone who participated in this year’s EndUser Forum, whether presenting or an audience member, thank you for your continued support of NCSP!